

CLAIMS

What is claimed is:

1. A therapeutic method for treating or preventing an  
5 ocular COX-2 mediated disorder comprising  
administering an ocular COX-2 mediated disorder-  
effective amount of a source of a COX-2 inhibitor  
compound to a mammal in need of such treatment,  
wherein the disorder is selected from the group  
10 consisting of blepharitis, post-operative  
inflammation and pain from corneal transplant  
surgery, endophthalmitis, episcleritis, keratitis,  
keratoconjunctivitis, keratoconjunctivitis sicca,  
post-operative inflammation and pain from lens  
15 implantation surgery, Mooren's ulcer and post-  
operative inflammation and pain from retinal  
detachment surgery.
2. The therapeutic method of Claim 1 wherein the  
20 source of the COX-2 inhibitor comprises a COX-2  
inhibitor.
3. The therapeutic method of Claim 2 wherein the COX-2  
25 inhibitor is selected from the group consisting of  
celecoxib, deracoxib, valdecoxib, a benzopyran COX-  
2 inhibitor, rofecoxib, etoricoxib, 2-(3,5-  
difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-  
cyclopenten-1-one and 2-(3,4-difluorophenyl)-4-(3-  
hydroxy-3-methylbutoxy)-5-[4-  
30 (methylsulfonyl)phenyl]-3(2H)-pyridazinone.
4. The therapeutic method of Claim 3 wherein the COX-2  
inhibitor is celecoxib.

5. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is deracoxib.
- 5 6. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is valdecoxib.
7. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is a benzopyran COX-2 inhibitor.  
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8. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is rofecoxib.
9. The therapeutic method of Claim 3 wherein the COX-2  
15 inhibitor is etoricoxib.
10. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one.  
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11. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone.  
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12. The therapeutic method of Claim 1 wherein the source of the COX-2 inhibitor comprises a prodrug of a COX-2 inhibitor.
- 30 13. The therapeutic method of Claim 12 wherein the prodrug of the COX-2 inhibitor is parecoxib.

14. The therapeutic method of Claim 1 wherein the ocular COX-2 mediated disorder is Mooren's ulcer.
15. The therapeutic method of Claim 14 wherein the source of the COX-2 inhibitor further comprises one or more ophthalmically acceptable excipient ingredients that reduce the rate of removal of the composition from the eye by lacrimation such that the composition has an effective residence time in the eye of about 2 to about 24 hours.  
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16. A pharmaceutical composition for treating or preventing Mooren's ulcer, in a mammal in need of such treatment, consisting essentially of a source of a COX-2 inhibitor compound and one or more ophthalmically acceptable excipient ingredients that reduce the rate of removal of the composition from the eye by lacrimation such that the composition has an effective residence time in the eye of about 2 to about 24 hours.  
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17. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of celecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of macular edema, intraoperative miosis and ocular pain.  
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18. The therapeutic method of Claim 17 wherein the ocular COX-2 mediated disorder is macular edema.  
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19. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of deracoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, acute injury to the eye tissue, glaucoma, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, retinopathies and uveitis.
20. The therapeutic method of Claim 19 wherein the ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
21. The therapeutic method of Claim 20 wherein the ocular COX-2 mediated disorder is macular edema.
22. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of valdecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of macular edema, intraoperative miosis and ocular pain.
23. The therapeutic method of Claim 22 wherein the ocular COX-2 mediated disorder is macular edema.
24. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising

- 5        administering an ocular COX-2 mediated disorder-effective amount of a benzopyran COX-2 inhibitor to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of glaucoma, macular edema, intraoperative miosis and ocular pain.
- 10      25. The therapeutic method of Claim 24 wherein the ocular COX-2 mediated disorder is macular edema.
- 15      26. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of parecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of conjunctivitis, glaucoma, macular edema, intraoperative miosis and ocular pain.
- 20      27. The therapeutic method of Claim 26 wherein the ocular COX-2 mediated disorder is macular edema.
- 25      28. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of rofecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, conjunctivitis, acute injury to the eye tissue, glaucoma, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative
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inflammation and pain from refractive surgery,  
retinitis, sarcoidosis and uveitis.

29. The therapeutic method of Claim 28 wherein the  
5 ocular COX-2 mediated disorder is post-operative  
inflammation and pain from cataract surgery.
30. The therapeutic method of Claim 28 wherein the  
10 ocular COX-2 mediated disorder is macular edema.
31. A therapeutic method for treating or preventing an  
15 ocular COX-2 mediated disorder comprising  
administering an ocular COX-2 mediated disorder-  
effective amount of etoricoxib to a mammal in need  
of such treatment, wherein the disorder is selected  
from the group consisting of post-operative  
inflammation and pain from cataract surgery,  
conjunctivitis, acute injury to the eye tissue,  
macular edema, intraoperative miosis, ocular pain,  
photophobia, post-operative inflammation and pain  
20 from refractive surgery, retinitis, retinopathies,  
sarcoidosis and uveitis.
32. The therapeutic method of Claim 31 wherein the  
25 ocular COX-2 mediated disorder is post-operative  
inflammation and pain from cataract surgery.
33. The therapeutic method of Claim 31 wherein the  
30 ocular COX-2 mediated disorder is macular edema.
34. A therapeutic method for treating or preventing an  
ocular COX-2 mediated disorder comprising  
administering an ocular COX-2 mediated disorder-

- effective amount of 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, conjunctivitis, acute injury to the eye tissue, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, sarcoidosis and uveitis.
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35. The therapeutic method of Claim 34 wherein the ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
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36. The therapeutic method of Claim 34 wherein the ocular COX-2 mediated disorder is macular edema.
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37. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, conjunctivitis, acute injury to the eye tissue, glaucoma, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, retinopathies, sarcoidosis and uveitis.
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38. The therapeutic method of Claim 37 wherein the ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
- 5   39. The therapeutic method of Claim 37 wherein the ocular COX-2 mediated disorder is macular edema.